

What did you find? Which borough is the most expensive? Any other interesting trends?

From 1998 to 2018 the London borough of Hackney had the greatest increase in average home prices at 6.198%. Ten of the boroughs increased 5% in 20 years. The boroughs have a positive correlation closer to 1 than 0.

The borough of Camden went from 110,k in 1995 to above 800,k in 2021. Camden peaked at the end of 2019 and began to decline possibly from covid-19. It also decreased in 2008 probably from the worldwide economic recession. The homes increased by 4.93% in 20 years making it the 11th highest increase among the boroughs.

Kensington & Chelsea is by far the most expensive borough currently. In 1995 it was 182,695, and increased to 1.33M in 2018. Kensington & Chelsea had an increase of 5.08% in average price of a home.

In 2018 the least expensive borough was Barking & Dagenham at 322,949 average price per home. Ironically they have the 12th highest increase in price at 4.89% in 20 years. In 1995 it was 50,460.

How did you arrive at your conclusion?

By cleaning, transforming, then visualizing the data from excel. After this we can create a graph that tells a story from the data. We can see a graph of the top 15 London Boroughs that had the greatest increases in average sales per home over 20 years. The data was cleaned by transposing the data, (flipping rows into columns and columns into rows). The data became clearer also by renaming the no name column to 'London\_Boroughs' and melting two columns together.

What were the main challenges you encountered? How did you overcome them? What could you not overcome?

The biggest issue was cleaning the data to make sense of what we were working with. The excel format needed to be changed, and some of the values were irrelevant to the majority of the data. Utilizing transpose, resetting the index and dropping all 0 values was helpful in cleaning the data. Consolidating the information was a big part of the

challenge. Looking at the data using the function `.head()` was helpful in determining where the state of the data was at currently.

Is there anything you'd like to investigate deeper?

- Which top 5 London Boroughs had the least amount of increase in average home prices over the 20 year time span.
- What Borough had the most fluctuation in prices during that time.
- Which 10 Boroughs had the greatest increase during any one year time frame.
- What was the greatest 5 decreases in price during the 20 years.
- From a coding aspect I would like to memorize the steps from this project to create a graph, clean data, etc. for future reference.